

Claims

1. Process for the preparation of an edible dispersion comprising oil and structuring agent and one or more of an aqueous phase and/or a solid phase, in which the dispersion is formed by mixing oil, solid structuring agent particles and the aqueous phase and/or the solid phase, wherein the solid structuring agent particles have a microporous structure of submicron size particles.
2. Process according to claim 1, wherein the solid structuring agent particles are at least 50% alpha-polymorph.
3. Process according to claim 1 or 2, wherein the structuring agent is edible fat.
4. Process according to any of claims 1 to 3, wherein the edible dispersion is a water and oil containing emulsion, optionally including a solid phase.
5. Process according to claim 3 or 4, wherein the solid structuring agent particles have a an average diameter $D_{3,2}$ of 60 μm or lower.
6. Process according to any of claims 1 to 5, wherein the solid structuring agent particles have an average particle size $D_{3,2}$ of 30 μm or lower.

7. Process according to any one of claims 1 to 6, wherein the solid structuring agent particles are prepared using a micronisation process.
8. Process according to any one of claims 1 to 7, wherein the solid structuring agent particles are prepared by preparing a homogeneous mixture of structuring agent and liquified gas or supercritical gas at a pressure of 5-40 MPa and expanding the mixture through an orifice, under such conditions that a spray jet is applied in which the structuring agent is solidified and micronised.
9. Process according to claim 8, wherein the homogenised mixture comprises oil.
10. Process according to claim 9, wherein the homogenised mixture comprises 10-90 wt.% based on the weight of the sum of oil and structuring agent.
11. Process according to claim 9 or 10, wherein temperature of the mixture of structuring agent and liquified gas or supercritical gas is such that the mixture forms a homogeneous mixture.
12. Process according to claim 11, wherein the temperature of the mixture of structuring agent and liquified gas or supercritical gas is below the slip melting point of the structuring agent at atmospheric pressure and above the temperature at which phase separation of the mixture occurs.

13. Process according to any of claims 8 to 12, wherein a gas jet is applied in addition to the spray jet.
14. Process according to claim 13, wherein the gas jet is positioned such that re-circulation of material expanded through the orifice is reduced or avoided.
15. Process according to the claim 13 or 14, wherein the gas from the gas jet flows essentially tangentially to the flow direction of the spray jet.
16. Process according to any of claims 8 to 15, wherein the spray jet is sprayed into a collection chamber, and a flow of gas having a temperature lower than the slip melting point of the structuring agent is fed into the collection chamber.
17. Use of micronised fat powder to stabilise an edible dispersion comprising oil.
18. Use according to claim 17, wherein the edible dispersion comprising oil is a water and oil containing emulsion, optionally including a solid phase.
19. Use according to claim 17, wherein the edible dispersion is a dispersion of 30-75 wt.% solid matter in oil.
20. Use according to claim 19, wherein the solid matter comprises dry particulate matter.

21. Use according to claim 20, wherein the dry particulate matter comprises one or more of flour, starch, salt, dried herbs, spices and mixtures thereof.